

REVIEW ARTICLE

Mother infant relationship and bonding myths and facts

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Mother-infant relationship has always interested researchers worldwide. This paper reviews the development of the concept of mother infant bonding through the years.

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Introduction

Mother-infant relationship has always interested researchers worldwide but actually, still, most of the studies are based on animal/mammal models.

In 1976 (revisited in 1980s), Marshall H. Klaus and John H. Kennell explored the concept of bonding in their book *Maternal-Infant Bonding*. They speculated that for humans, just as for other types of animals, there is a sensitive period at birth when mothers and newborns are programmed to be in contact with each other. By comparing mother-infant pairs who bonded immediately after birth with those who didn't, they concluded that the early-contact mother-infant pairs developed a closer attachment. Thus, literally bonding meant strong attachment of the mother to the infant, and infant to the mother, which develops shortly after birth.

That book came out in the wake of a critique of medical management of labor, delivery and infants. Many caregivers and simple citizens asked for more natural approaches to childbirth. Since then on, scientists are still learning a lot about bonding.

At present, it seems that a strong tie between parents and their child provides the baby's first model for intimate relationships and promotes a sense of security and positive self-esteem [6]. On the other hand, parents' responsiveness to an infant's signals could affect the child's social and cognitive development for the future. Psychoanalysts have theorized that if someone doesn't have this necessary parent-child relationship in his formative years (usually from birth to 36 months), he won't be able to love as an adult. For example, John Bowlby, a British psychoanalyst, studied children growing up without parents in the first years of life; he found that these children often had problems relating with others and forming bonds later in life. From such studies, psychologists have confirmed how important, sensitive, responsive, and consistent parenting is to child development [4]. They also stated that parents who are separated from their newborns after birth have difficulty forming that essential parent-infant bond, citing studies conducted with animals (mother mice refuse to care for their young if they are separated right after birth).

Fortunately, humans are not mice, and more recent research suggests human mothers and fathers generally are quite able to be loving parents even if they must be separated from their babies as a result of prematurity, illness, or other reasons. Bonding is a

complex, personal experience that takes time. There's no magic formula and it can't be forced. A baby whose basic needs are being met won't suffer if the bond is delayed for some time at first.

At birth, the baby's physiology is fully functional to sustain life, but needs nurturing and protection. So that, from the moment of birth the infant is stormed with sensations and is programmed to learn from constant repetitions. The sensations that the baby receives while being nurtured and kept safe, provide the stimuli that triggers the Bonding Process. The experiences of touch (mouth while feeding, massage, skin-to-skin), sight (mother's face), and sound (mother's voice), all become imprinted in the brain, and stimulate the pleasure pathways and release endorphins. It is now understood that the hormone oxytocin, produced after delivery and during lactation, plays a vital part in initiating and sustaining the neurological bonding process in the baby, and in influencing the mother's specific bonding behaviours with the baby [2,7].

Bonding is a complex developing process, not something that takes place within minutes and not something that has to be limited to happening within a certain time period after birth. It is therefore important that studies do not acquire pessimistic connotations (i.e. a separation has occurred, and therefore trouble' can be expected for the mother, father and baby).

Klaus and Kennell themselves in 1982-83 sought to specify their previous (1976) position; humans are highly adaptable, and there are many fail-safe routes to attachment. Sadly, some parents who missed the bonding experience have felt that all was lost for their future relationship. This was (and is) completely incorrect. If ideal conditions have not been met, one needs to be reassured that bonding will still take place. Some parents feel an intense attachment within the first minutes or days after their baby's birth. For others, bonding is a product of everyday caregiving, especially if the baby is adopted or has been in intensive care for a long period.

Of course, it's easier to bond with a baby if everything has been going well and the people around are supportive and help in developing parenting abilities. At the hospital, experts recommend having a baby stay in mother's room. Of course, for premature babies or babies with special needs, the support from the hospital staff is fundamental to make bonding easier [9]. The caregivers can teach how to hold and handle a baby through openings in the isolette and encourage to spend time watching, touching, and talking with own baby. Nurses can help in learning to bathe and feed the baby. On the contrary, the bonding delays if the mother is exhausted and in pain following a prolonged, difficult delivery or a cesarean section without any help after [10]. Also postpartum depression can affect mother-infant tie. If a woman doesn't feel

that she's not bonding with her baby it may be a sign of postpartum depression. It's difficult to measure bonding. Parenting is highly variable with too many biases about what is good mothering. Because of challenges to measuring, there is limited scientific evidence that the first hour after birth is a special or sensitive time [1,3].

Nonetheless, positive changes among health care providers have occurred because of recent recognition of the process of bonding. Many hospitals have radically humanized the way in which parents and babies are treated. Parents are allowed greater contact with babies, particularly in intensive care nurseries. There, parents can now often participate in the feeding, handling, and general care of their babies, instead of waiting until their infants are released from the hospital.

Results of the early research on bonding at birth: (1) women and infants can remain together for much of the first few hours after birth; (2) fathers and other family members are often present at or soon after birth; (3) rooming in is the norm in most hospitals and birth centers; (4) breastfeeding is initiated within a couple of hours after birth; (5) many hospitals allow skin-to-skin contact soon after birth and then for premature babies to positively influence breastfeeding.

What we caregivers should do for better bonding:

1. Delay routine procedures: Usually nurses do routine procedures (vitamin K shot and putting eye ointment in baby's eyes) immediately after birth and then presents the baby to mother for bonding. The eye ointment temporarily blurs baby's vision or causes his/her eyes to stay closed. Parents need to see those eyes.

2. Allow contact: After birth put baby on mother's abdomen and chest, unless a medical complication requires temporary separation.

3. Let babies breastfeed right after birth: Most babies are content simply to lick the nipple; other have a strong desire to suck at the breast immediately after birth. This nipple stimulation releases oxytocin, which increases the contractions of uterus and lessens postpartum bleeding. Moreover, early sucking also stimulates the release of prolactin, the hormone that helps mothering abilities.

4. Room in with the baby: Allow healthy mothers and healthy babies to remain together throughout their hospital stay to support visual, tactile, olfactory, auditory, and sucking connection with the baby.

5. Encourage mothers/fathers to touch, gaze and talk to their baby: Not only is skin-to-skin contact important but

caressing the baby also. Besides being enjoyable, stroking the skin is medically beneficial to the newborn [5]. The skin, the largest organ in the human body, is very rich with nerve endings. At the time when baby is making the transition to air breathing and the initial breathing patterns are very irregular, stroking stimulates the newborn to breathe more rhythmically [8]. The therapeutic value of a parent's touch: The newborn can see with an eye-to-eye distance of 20–25 cm; amazingly it's about the usual nipple-to-eye distance during breastfeeding. It's useful to place the baby in the face-to-face position. During the first hours and days after birth, a natural baby-talk dialogue will develop between mother and infant. Voice-analysis studies have shown a unique rhythm and comforting cadence to mother's voice.

These efforts have proven to be important for the continuing and constant interaction between mother and infant in the establishment of maternal-infant attachment, which underwrites the functional adjustment and well-being of the dyad.

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